



BBB Tank Services, Inc.

AST Services and New API Tanks

August 12, 2013

LAZARUS Energy (BLUE DOLPHIN)
801 Travis Street
Suite 2100
Houston, Texas 77002
Attention Mr. Steve Wilson

Reference-	Proposal-	Tank Bottom and Cone Roof Replacement	TANK 16
	Location	Ingleside, Texas	
	Description	(1) 100'-0" Diameter x 40'-0" High Cone Roof Tank w/Aluminum Internal Floating Roof	
	BBB Proposal-	N13-511 REVISION 6	

Revision 1- Added demolish the existing floating roof
Added a new Aluminum IFR
Removing Insulation for roof and bottom work.

Revision 2- Delete Tank Bottom Replacement.

Revision 3- a. The tank diameter is 100'-0 feet in lieu of 98'-0 as previously stated.
b. The tank bottom will not be replaced. Nine (9) spot welds/12" patch plates is all that is required.
c. Add a 3 x 3 x 3/16 angle cap on the shell where the shell insulation will have been removed from the top shell course to preserve the balance of the shell insulation. The insulation will not be replaced on the top shell course.
d. Add a 24" API-650 Shell Manway (Mixer Manway) Add gussets to reinforce the manway. (The Mixer is by others).

Revision 4- Delete the Aluminum internal floating roof.
Delete the Mixer Manway.
Include the removal and replacement of the roof support structure in the proposal.
Include the removal and replacement of the spiral stairway, top platform and (2) 10'-0 roof handrails.

Revision 5- Break out roof replacement, top angle replacement and roof support structure replacement.

Revision 6- Revised the proposal to reflect items discovered prior to the start of the tank repairs and after a conference with Steve Wilson, Gary Thompson, Bubba Gamble

- a. The existing door sheet must be replaced since it is not cut to API-653 tolerances.
Add \$ (b) (4) sales tax for this item.
- b. After meeting on site there is (3) annular sketch plates that must be replaced. This is in addition to the (9) patch plates originally quoted.
Add \$ (b) (4) sales tax for this item.
- c. There is above ground piping around this tank which prevents our crane, skid steer, manlift from maneuvering around the tank. BBB crews must built ramps over this piping to accomplish this.
Add \$ (b) (4) sales tax for this item.
- d. ***Removal of the existing floating roof was not in the original bid.
Add \$ (b) (4) sales tax for this item.
- e. ***In order to verify that the soil under this tank bottom is not contaminated coupons were cut, soil samples taken and the soil tested by a testing laboratory.
Add \$ (b) (4) sales tax for this item.



BBB Tank Services, Inc.

AST Services and New API Tanks

Page 2 of BBB Proposal N13-511

REVISION 6

- f. **Furnish and install a new Gauging Systems Liquid Level Gauge. (Shell Mounted).**
Add \$ (b) (4) sales tax for this item.
- g. **Jack up the roof support columns then furnish and install 4'-0 x 4'-0 x 3/8" load bearing plates under the existing roof support columns.**
Add \$ (b) (4) sales tax for this item.
- h. **Abrasive blast the existing tank bottom and 3'-0 up the interior shell to SSPC-SP-10, Near White" and then apply Sherwin Williams PHENICON 920. The coating is a epoxy- phenolic coating with fiberglass flakes in it and is manufactured for submersion service in petroleum products.**
Add \$ (b) (4) sales tax for this item.
Note: The spent abrasive is to be loaded in to owner furnished trash bins at the tank site for disposal by others or by BBB Tank Services at cost plus (b) (4)
- i. **Furnish and install a new aluminum internal floating roof with adjustable support legs, (2) automatic bleeder vents, (1) 24" deck manway, (1) automatic gauge well, column and gauge pole negotiators, (1) gauging funnel, (1) primary mechanical mini-shoe seal with Grade 304 stainless steel shoes, mounting hardware and 10 mil Teflon sealing fabric.**
Add \$ (b) (4) sales tax for this item.
- j. **Cathodic Protection- drilled around the tank perimeter and deep well (hole) installed since the tank bottom is not being replaced.**
- k. **Add \$ (b) (4) sales tax for this item.**

*** These items have been completed. Please issue a Purchase Order for these items and a Bank letter approving payment prior to starting the balance of the repairs on this tank.

As per the instructions to bidder and API-653 latest standards we propose to furnish labor, materials and equipment to complete the following scope of work.

1. Mobilize.
2. Conduct a site specific safety meeting to discuss safety issues involved with this project and the site rules, regulations for contractors and safety rules.
3. A jobsite JHA will be prepared by the BBB Foreman and his crew and preferably with the owner's representative, pointing out the possible hazards they will face in completing this task and remedies or safety steps to eliminate or limit those hazards
4. Receive and unload materials and equipment.
5. **REVISION 3-** A. Remove insulation on the 1st shell course where the mixer manway is to be installed/one foot of insulation around the tank bottom and where the door sheet will be for new bottom installation.
B. Remove 6'-0 of insulation from the top shell course so the tank roof can be replaced.
C. Place insulation in plastic garbage bags for disposal by others.
D. Add a 3 x 3 x 3/16 angle cap on the shell where the shell insulation will have been removed from the top shell course to preserve the balance of the shell insulation. The insulation will not be replaced on the top shell course.

REVISION 6 BASE BID

Insulation Removal

Labor and Equipment

\$ (b) (4)

Sales tax

\$ (b) (4)

Duration

1-2 weeks.

This is no longer part of the scope of work. However, we still need \$ (b) (4) sales tax to install our insulation brackets for scaffolding.

NOTE: Due to this decrease in the Scope of Work a total credit of \$ (b) (4) is available for this item.



BBB Tank Services, Inc.

AST Services and New API Tanks

Page 3 of BBB Proposal N13-511

REVISION 6

6. Repair the nine areas requiring repairs in the tank bottom. Nine 12"x12"x1/4" thick patch plates are included for this task. The corners of the patch plates will be rounded and they will be vacuum box tested after installation.

Price	BOTTOM PATCH PLATES	\$ (b) (4)	
	Add sales tax	(b) (4)	
	Total	\$ (b) (4)	(REVISION 6 No Change)
	Duration	1 Day	

NOTE: This price is good only if done in conjunction with the other tasks in this estimate.

7. Reinstall the door sheet after repairs are made.
8. Broom clean the tank.
9. Tests include:
 - b. Vacuum box testing of the new bottom weld seams.
 - c. X-ray of the door sheet as per API-653.
 - d. Visually check all of our work.
 - e. Hydrotest the tank is by others, if required.
9. Clean up work site.
10. Demobilize.

FIXED CONE ROOF REPLACEMENT (REVISION 5)

1. Mobilize to the tank site.
2. Conduct a site specific safety meeting discussing the hazards and possible hazards that are involved with completing this task Prior to starting the job.
3. Unload materials and equipment.
4. Scaffold the tank shell with Tank Builders type scaffolding.
5. Remove and replace existing roof skin with 3/16" A-36 material. Price includes a lap weld on the top side only.
6. All roof nozzles and Manways are to be new.
Including- (1) 24" roof hatch.
 - (1) 8" 150# roof nozzle with 8" Gauge Hatch.
 - (1) 2" 150# roof nozzle.
 - (1) 12" Fixed roof center vent.
7. Scrap metal is to be loaded into an owner furnished bin for disposal by others.
8. Includes hot work to demolish the existing roof skin and install new roof skin.
9. Project is based on a non-permit required confined space.
10. Our price is based on no matting around tank for crane settlement.
11. Our price is based on there being no lead or asbestos on the tank roof.
12. No shell repad or nozzle work is included.
13. Price is based on working 5 days a week using Saturday as a makeup day.

REVISION 5 100'-0 diameter fixed roof replacement

BASE BID	Materials/Fabrication/Freight/Consumables	\$ (b) (4)	
	Equipment/Fuel	(b) (4)	
	Labor	(b) (4)	
	Total	\$ (b) (4)	(REVISION 6 No Change)
	Duration of project is 3-4 weeks		



BBB Tank Services, Inc.

AST Services and New API Tanks

Page 4 of BBB Proposal N13-511

REVISION 6

- | | | |
|-----------------|---|----------------------|
| 14. REVISION 5- | Remove and replace the top angle. | Add \$ (b) (4) |
| | Duration | 3 field working days |
| 15. REVISION 5- | Remove and replace the roof support structure with a BBB Tank Services standard structure. | Add \$ (b) (4) |
| | Duration | 3 Weeks |
| 16. | Remove and replace the double stringer spiral stairway, top platform and (2) 10'-0 long roof handrails. (Galvanized). | |

REVISION 6 New Stairway, Platform and Handrail

BASE BID	Materials/Fabrication/Freight/Consumables	\$(b) (4)
	Equipment/Fuel	(b) (4)
	Labor	(b) (4)
	Total	\$(b) (4)

Duration of project is 4-5 (Includes drawings and fabrication. Field erection is 3-4 days).

The stairway does not need to be replaced. Twenty stair treads and the top platform need to be repaired at a cost of \$(b) (4) in sales tax.

NOTE: Due to this Scope of Work change a total credit of \$(b) (4) is available for this item.

Alternate - Add \$ (b) (4) for a Gauging Systems Liquid Level Indicator to the tank including new piping, pipe clips and associated items.

Terms and Conditions

1. Sales and/or Use Tax is not included in our proposal. Add 8.25% to our base bid items if sales tax is to be accrued and paid by BBB Tank Services, Inc.
2. Our price does not include a dedicated fire, hole, bottle or safety watch. If required this is to be furnished by the owner or furnished by BBB at \$(b) (4) per day- one day minimum for each required. BBB only includes a fire/combination hole watch until the door sheet is cut and for when it has been reinstalled.
3. Supplied air or working in supplied air is not included in this proposal.
4. Lead or asbestos abatement is not included.
5. Surface preparation or painting is not included.
6. BBB will bill upon let of contract for materials/fabrication/Engineering and freight, then bill twice monthly until the end of the project.
7. Payment is net 10 days upon invoice date.
8. Prices are good for 30 days.
9. SPECIAL NOTE: Some prices in this estimate are not "stand alone" pricing. Mobilization/demobilization/set up and other items are in the roof replacement pricing.
10. SPECIAL NOTE: The prices given are not to exceed numbers. However, there may be some discovery items that could affect the prices, and, if so, they will be immediately pointed out to the LAZARUS jobsite representative prior to addressing them.

Thank you for the opportunity to quote this project. Hopefully we will be the successful bidder and we will have the opportunity to work with you on this project.

Sincerely,
BBB Tank Services, Inc.

Robert E. Swain
Project Manager